

REMARKS

With respect to the above amendments, applicants submit that the additions to Claims 1 and 2 are fully supported by the specification. More particularly, the claims have been amended to add that the method is used for detecting a phosphorylated peptide and judging whether a peptide is phosphorylated. Support for this amendment is found in the original specification at p. 6, lines 13-20. No new matter is included in the above amendments.

In the Office Action, the Examiner first rejected Claims 3 and 6 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out distinctly claim the subject matter which applicants regard as the invention. Applicants respectfully aver that Claims 3 and 6 are properly formed under the rules.

In this regard, the Examiner indicated that Claims 3 and 6 are not clear as to whether the applicants are claiming the noble metal or the precursor thereof per se. Applicants submit that Claim 3 clearly defines the invention as a noble metal compound with a particular substituent, as recited, on its surface. Thus, it is the noble metal compound with the substituent, per se, that is being claimed in Claim 3. Similarly, Claim 6 clearly defines a precursor compound of a noble metal with the recited substituent on its surface. As such, it is a precursor compound, per se, of a substituent on the surface of a noble metal that is being claimed in Claim 6.

Although the Examiner suggests that Claims 3 and 6 may depend from Claim 1, this is not the case. In this regard, Claim 1 is directed to a method for measuring a surface plasmon resonance on a noble metal compound, albeit the noble metal compound with a substituent on its surface as recited in Claims 3 and the precursor compound of Claim 6. However, there is no requirement to use the method of

Claim 1 on the compounds of Claims 3 and 6, which compounds can be used in other environments. Thus, Claims 3 and 6, directed to the compounds, do not require any method limitations, as recited in Claim 1, to be complete and clear under 35 U.S.C. § 112, second paragraph.

Based on the above, applicants respectfully request that the rejection under 35 U.S.C. § 112, second paragraph, be removed.

Turning to the substantive matters raised, the Examiner rejected Claims 1-8 under 35 U.S.C. § 103(a) as being unpatentable over Seher in view of Koike et al. Applicant respectfully traverses this rejection.

The present inventions set forth in Claims 1 and 2 are used for detecting a phosphorylated peptide in a subject sample and judging whether a peptide in the subject sample is phosphorylated or not. In contrast, the Seher reference describes the detection of DNA but does not suggest the detection of a peptide and a protein. Instead, Seher is limited to detecting biomolecules and, although proteins like biotin are described in col. 7, lines 41-46 of Seher, the protein is used for labeling DNA and **is not** the subject to be detected.

As such, the Seher reference does not teach or suggest the present claimed invention defined by detecting a phosphorylated peptide in a subject sample and judging whether a peptide in the sample is phosphorylated or not.

Moreover, the method of Seher is not experimentally demonstrated, even for detecting DNA. The description of the graph of Figure 3 does not include experimental data, and only provides an expected result, as set forth at col. 10, lines 55-62. On the other hand, the present invention is experimentally demonstrated, with the

example showing that a phosphorylated peptide in a sample can be detected and judged whether a peptide is phosphorylated in the sample.

As for Claims 3-8 of the present application, Seher does not remotely suggest the noble metal compound or the precursor compound claimed here, including the noble metal with the recited substituents on a surface thereof. Therefore, the Seher reference fails.

Moreover, the deficiencies of Seher are not overcome by the combination with Koike. With respect to Claims 1 and 2, the Koike reference describes capture of a substance having an anionic substituent but does not disclose or suggest detecting a phosphorylated peptide or even biomolecules. With respect to Claims 3-8, Koike does not teach or suggest that the zinc complex forms a compound with the other component through a linker group as presently recited in all of Claims 1-8.

It is therefore clear that one skilled in the art would not be led to the present invention by combination of Seher and Koike. Specifically, there is no teaching or suggestion to bind the compound of Koike, even if it met the limitations of the present claims to require a linker group between the zinc complex and the noble metal, which it does not, to a boundary surface and then to use the method of Seher to detect for a phosphorylated peptide.

In light of the above, applicants respectfully submit that all of the pending claims are patentable over the cited prior art and that the application is in proper form for allowance. A notice of allowance including all pending claims is therefore respectfully requested and earnestly solicited.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Gerald E. Hespos".

Gerald E. Hespos, Esq.

Atty. Reg. No. 30,066

Customer No. 01218

CASELLA & HESPOS LLP

274 Madison Avenue - Suite 1703

New York, NY 10016

Tel. (212) 725-2450

Fax (212) 725-2452

Date: *JANUARY 26, 2010*